

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) An open MRI system comprising:  
an open MRI magnet system; and  
a vibration isolation system adapted to support the MRI magnet system, the vibration isolation system comprising an adjustable balance mass rigidly attached to the open MRI magnet system and configured to be adjusted so as to raise or lower the center of gravity of the magnet system;

wherein the MRI magnet system comprises a clam-shell MRI magnet system.

2. (Original) The open MRI system of claim 1, wherein a spring constant and damping of the vibration isolation system are adjustable.
3. (Original) The open MRI system of claim 1, wherein the vibration isolation system comprises a plurality of pneumatic isolators.

Claims 4-6. (Cancelled)

7. (Original) The open MRI system of claim 1, wherein the vibration isolation system is secured to a floor and the MRI magnet system is attached over the vibration isolation system.

8. (Cancelled)

9. (Original) The open MRI system of claim 1, further comprising a structural holder positioned between the vibration isolation system and the MRI magnet system.

10. (Cancelled)

11. (Original) The open MRI system of claim 10, wherein the vibration isolation system is mounted on posts such that MRI magnet system supports do not contact a floor of a site where the MRI magnet system is located.

Claims 12-13 (Cancelled).

14. (Previously Presented) The open MRI system of claim 1, further comprising:

- (a) a first assembly comprising:
  - (1) a longitudinally-extending and generally-vertically-aligned first axis;
  - (2) at least one superconductive main coil positioned around said first axis and carrying a first main electric current in a first direction; and
  - (3) a first vacuum enclosure enclosing said at least one superconductive main coil of said first assembly;
- (b) a second assembly longitudinally spaced apart from and disposed below said first assembly, comprising:
  - (1) a longitudinally-extending second axis generally coaxially aligned with said first axis;
  - (2) at least one superconductive main coil positioned around said second axis and carrying a second main electric current in said first direction; and
  - (3) a second vacuum enclosure enclosing said at least one superconductive main coil of second assembly; and
- (c) at least one support beam external to said first and second vacuum enclosures having a first end attached to said first assembly and having a second end attached to said second assembly.

15. (Original) The open MRI system of claim 14, wherein a spring constant and damping of the vibration isolation system are adjustable.

16. (Original) The open MRI system of claim 14, wherein the vibration isolation system comprises a plurality of pneumatic isolators.

Claims 17-18. (Cancelled)

19. (Original) The open MRI system of claim 14, wherein the vibration isolation system is secured to a floor and the MRI magnet system is attached over the vibration isolation system.

Claims 20-38. (Cancelled)

39. (Previously Presented) The open MRI system of claim 1, wherein the open clam-shell MRI magnet system comprises a vertically aligned MRI magnet system.

40. (Previously Presented) The open MRI system of claim 39, wherein the vertically-aligned, open clam-shell MRI magnet system comprises:

- a first magnet assembly containing a first superconductive coil;
- a second magnet assembly containing a second superconductive coil; and
- only two support members supporting the second magnet assembly over the first magnet assembly, wherein the two support members are not diametrically aligned to a diameter line of the first and the second magnet assemblies.